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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,327	06/19/2003	Luigi Occhipinti	2110-66-3	6979

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EXAMINER

MORAN, MARJORIE A

ART UNIT PAPER NUMBER

1631

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/601,327

Applicant(s)

OCCHIPINTI ET AL.

Examiner

Marjorie A. Moran

Art Unit

1631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-37 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-2, directed to a memory device comprising DNA and nanotubes, classified in class 257, subclass 40..
- II. Claims 3-21, directed to a method of making a memory device, classified in class 435, subclass 6.
- III. Claims 22-23, directed to a method of determining DNA hybridization, classified in class 435, subclass 6.
- IV. Claims 24-25, directed to a sensor to detect hybridization, classified in class 257, subclass 40.
- V. Claims 26-29, directed to a memory device limited to be different from that of Group I, classified in class 257, subclass 40.
- VI. Claims 30-31, directed to a computer system, classified in class 702, subclass 19.
- VII. Claims 32-37, directed to a method of storing data in a molecular memory device, classified in class 435, subclass 6.

The inventions are distinct, each from the other because of the following reasons:

Invention II is related to Inventions I, IV and V as process of making and product made.

The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, although none of the devices is actually limited to be one made by the method of Group II, any of the devices of Inventions I, IV or V may be made using the process of Invention II.

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Inventions I, IV, and V are related to Inventions III and VII as products and processes of use. The inventions can be shown to be distinct if either or both of the following can be shown:

(1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, although neither of the methods of Groups III or VII are limited to use any particular device, any one of the devices of Inventions I, IV or V may be used in either of the methods of Group III or Group VII.

Inventions I, IV and V are separate and distinct. Although all of Groups I, IV and V are directed to memory devices or sensors comprising nanotubes, the device of each Group is limited to be different from the device of any other Group, and comprises limitations not recited for the device of any other Group. Specifically, the sensor of Group IV is limited to comprise means for applying an electrical field and for determining whether hybridization has occurred, not recited in any other Group. The device of Group V comprises a substrate and plurality of memory cells not recited in any other Group. Thus, the devices in each of Groups I, IV and V are separate and distinct.

Invention VI is not related to any of Inventions I-V or VII. The computer system of Invention VI is not limited to comprise any of the devices of Inventions I, IV or V, nor is it limited to be one made using the method of Invention II. The method of Invention II is not directed to produce a computer system of any kind. Neither of the methods of Inventions III or VII recite use of the computer system of Invention VI and the computer system of Invention VI is not limited to be one for use in either of the methods of Inventions III or VII. Thus, although the computer system of Invention VI recited some limitations in common with other claims (e.g. nanotubes), Invention VI is not related to any of Inventions I-V or VII.

Groups II, III and VII are unrelated. Neither of Groups III or VII recites use of a product of Group II, and Group II is not limited to produce a device for use in either of the methods of Groups III or VII. The method of each Group recites steps different from that of any other Group, and each Group is directed to a different outcome, or intended result. In addition, the method of any one Group may be preformed independently, without knowledge of or reference to the results or steps of the method of any other Group. For these reasons, Groups II, III and VII are not related.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and the search required for Group VII is not required for Groups I-VI, the search for Group VI is not required for Groups I-V and VII, the search for Group V is not required for Groups I-IV and VI-VII, etc., restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marjorie A. Moran whose telephone number is (571) 272-0720. The examiner can normally be reached on Mon,Wed: 7-1:30; Tue,Thur: 7:30-6; Fri 7-3:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel can be reached on (571)272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marjorie A. Moran
Primary Examiner
Art Unit 1631

Marjorie A. Moran
11/22/05